

We Claim:

1. An image display apparatus comprising

a light-transmitting first substrate that has a display area in which a large number of pixels each having an active element are arranged in a matrix form, and

a light-transmitting second substrate that is sealed to the first substrate by interposing a sealant on a picture-frame sealing area located in the outer area of the display area, wherein

the image display apparatus further comprises an ultraviolet-ray shield resin film for shielding ultraviolet rays provided between the first substrate in the sealing part and the sealant.

2. The image display apparatus according to claim 1, further comprising an ultraviolet-ray shield resin film provided in a portion excluding a sealant interposing portion of the second substrate.

3. An image display apparatus comprising

(a) a light-transmitting first substrate on which a plurality of pixels are arranged in predetermined locations in a matrix form, each pixel composed of an anode electrode driven by an active element, an emitting layered product such that an organic

layer having at least an emitting layer is formed on an area encircled by pixel separation banks made of a resin formed on the anode electrodes, and a cathode electrode that sandwiches the emitting layered products between itself and the anode electrodes; and

(b) a light-transmitting second substrate that is sealed to the first substrate by interposing a sealant on a picture-frame sealing area located in the outer area of the display area, wherein

the image display apparatus further comprises an ultraviolet-ray shield resin film for shielding ultraviolet rays in the sealing area between the first substrate and the sealant.

4. The image display apparatus according to claim 3, further comprising either an ultraviolet-ray shield resin film or a metallic light-shield film for shielding ultraviolet rays provided in a portion excluding a sealant interposing portion of the second substrate that corresponds to the picture-frame sealing area of the second substrate.

5. The image display apparatus according to claim 3, wherein an adsorbent for adsorbing gases and moisture is provided inside the picture-frame sealing area of the second substrate.

6. The image display apparatus according to claim 3, wherein a forming material of the ultraviolet-ray shield resin film formed on the first substrate has the same properties as the material of the pixel separation banks.

7. The image display apparatus according to claim 3, wherein a forming material of the ultraviolet-ray shield resin film has the same properties as the material of the pixel separation banks;

a cross section vertical to the first substrate lying in a direction crossing the picture-frame sealing area has a recess composed of an inner peripheral protrusion protruding on the display area side and an outer peripheral protrusion protruding on a side opposite to the display area side;

thicknesses of the inner peripheral protrusion and of the outer peripheral protrusion are larger than the thickness of the pixel separation banks;

the second substrate has a rib that runs along its periphery and engages with the recess of the ultraviolet-ray shield resin film, and

the sealant exists between the recess and the rib.

8. The image display apparatus according to claim 3, further comprising a metallic light-shield film for shielding ultraviolet rays provided between the ultraviolet-ray shield

resin film and the first substrate.

9. The image display apparatus according to claim 3, wherein the emitting layer is an organic electroluminescence emitting layer.

10. The image display apparatus according to claim 1, wherein the active element is a thin film transistor using a low-temperature polysilicon semiconductor layer.

11. The image display apparatus according to claim 3, wherein the active element is a thin film transistor using a low-temperature polysilicon semiconductor layer.

12. A process for producing an image display apparatus, comprising at least:

a display area formation step of forming a large number of active elements arranged in a display area of a light-transmitting first substrate in a matrix form, anode electrodes driven by the respective active elements, and electrodes/wiring including external terminals;

a pixel separation banks/ultraviolet-ray shield resin film formation step of simultaneously forming pixel separation banks for separating the anode electrodes and an ultraviolet-ray shield resin film that is in the shape of a picture frame along

the outer area of the display area of the first substrate and has a recess constructed by an inner peripheral protrusion and an outer peripheral protrusion that are formed in a central portion of the picture frame, in terms of a running-around direction;

an organic emitting layer formation step of forming organic emitting layers on the respective anode electrodes that were separated by the pixel separation banks;

a cathode formation step of forming a cathode electrode that covers the organic emitting layers;

an adsorbent bed formation step of forming an adsorbent bed for adsorbing gases and moisture in an area on the light-transmitting second substrate encircled by the protruding rib running around in the shape of a picture frame on the periphery of the second substrate that corresponds to a sealing area having the ultraviolet-ray shield resin film formed on the first substrate;

a sealant application step of applying a sealant to the recess of the ultraviolet-ray shield resin film of the first substrate; and

a substrate sealing step of engaging the rib part of the second substrate with the recess of the first substrate and sealing the two substrates with the sealant.

13. The process for producing an image display apparatus

according to claim 12,
further comprising a metallic light-shield film formation step
of forming a metallic light-shield film for shielding
ultraviolet rays on the external terminals located in positions
where the ultraviolet-ray shield resin film is formed with an
intermediary of an insulating film before the separation
banks/ultraviolet-ray shield resin film formation step.

14. The process for producing an image display apparatus
according to claim 12, wherein
the separation banks/ultraviolet-ray shield resin film
formation step is a step that uses a printing method in which
a screen mask that has an aperture pattern corresponding to
the pixel separation banks and an aperture pattern corresponding
to the ultraviolet-ray shield resin film is used.

15. The process for producing an image display apparatus
according to claim 12, wherein
the pixel separation banks and the ultraviolet-ray shield resin
film are formed with a resin resist in which ultraviolet-ray
absorbing particles are mixed.